



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/585,511

07/10/2006

Morimasa Wada

062577

4164

38834

7590

10/01/2009

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

EXAMINER

WIECZOREK, MICHAEL P

ART UNIT

PAPER NUMBER

1792

NOTIFICATION DATE

DELIVERY MODE

10/01/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

Office Action Summary	Application No. 10/585,511	Applicant(s) WADA ET AL.	
	Examiner Michael Wieczorek	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 5-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/10/2006, 10/10/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1792

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1 through 4, in the reply filed on August 27, 2009 is acknowledged. The traversal is on the ground(s) that the method taught by prior art Nishida et al is not the same as the method disclosed in claim 1 of the present application. This is not found persuasive because for a restriction of a national stage 371 application to be proper the groups of claims must lack unity and lack of unity exists when a technical feature shared among the groups is known within the art. As was discussed in the previous restriction requirement dated July 31, 2009, the technical feature linking the groups of claims was a polarizing film. Nishida teaches the formation of a polarizing film made by a method of dyeing a polymer film followed by stretching and drying the film in a manner similar to that disclosed within claim 1. Furthermore, Nishida teaches that the stretching steps may be conducted in multiple stages (Page 2 Paragraph 0022), thus Nishida teaches a polarizing film formation process where the film is stretched before a final drying step. Thus, based on the teachings of Nishida, there is no "special technical feature" linking the groups I-IV.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 5 through 8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 27, 2009.

Art Unit: 1792

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugino et al (U.S. Patent No. 2002/0015807) in view of Nishida et al (U.S. Patent No. 2003/0062645).

Sugino teaches a method of forming a polarizing film used for LCDs comprising dyeing a polyvinyl alcohol (PVA) film followed by stretching then drying the film. Sugino further teaches that the formation steps may be conducted simultaneously and that there is no limitation on the order of the steps. (Page 1 Paragraph 0005).

Sugino does not teach that the drying is done while conveying the film with rolls or under a condition of there being a R/W ratio of 0.5 to 4.0.

Nishida teaches a method of manufacturing PVA polarizing films (Page 1 Paragraph 0002). Specifically Nishida teaches a drying step comprising heating and conveying the dyed film with three rollers where the L/W or R/W ratio is from 0.2 to 0.6 and where L is the distance

Art Unit: 1792

between a pair of adjacent rolls and W is the initial width or width of an un-oriented/stretched film. Nishida further teaches that by having the rollers configured to have an R/W ratio of 0.2 to 0.6, necking of the polymer film during stretching is suppressed. (Page 1 Paragraphs 0006, 0009-0010, Pages 2-3 Paragraph 0026 and Figure 2).

At the time the present invention was made it would have been obvious to one of ordinary skill in the art that during the drying step the film would be conveyed by at least two rollers under the condition of having an R/W ratio of 0.5 to 4.0. One of ordinary skill in the art would have a reasonable expectation of success in using the drying method of Nishida in the polarizing film formation method of Sugino since the drying method of Nishida is a known drying/stretch method in the art for forming PVA polarizing films. Furthermore, as taught by Nishida, by drying/stretching the film when the R/W ratio is 0.2 to 0.6, necking of the polymer film during stretching can be prevented, thus it would have been obvious to dry/stretch the polymer film of Sugino under the conditions of the R/W ratio being 0.2 to 0.6 as taught by Nishida.

As for the R/W ratio being 0.5 to 4.0, as was discussed above, Nishida teaches a R/W ratio of 0.2 to 0.6 which overlaps with the claimed range. Overlapping ranges are *prima facie* evidence of obviousness. I would have been obvious to one having ordinary skill in the art to have selected the portion of Nishida's R/W ratio range that corresponds to the claimed range. *In re Malagari*, 182 USPQ 549 (CCPA 1974)

As for claim 2, as was discussed above, the drying step of Nishida comprises three rolls (see Figure 2 of Nishida), where the distance L or R denotes a distance between at least one pair of the adjacent rolls selected from the three rolls.

Art Unit: 1792

As for claim 3, Neither Sugino nor Nishida teaches that during the drying step at least 50 of the film is dried under the condition of being conveyed by roller with a R/W ratio of 0.5 to 4.0, but the amount of drying of the film is a relevant process parameter for the drying method of Nishida in that the amount of film dried during the stretching step determines how long the heat treatment step conducted after stretching is done. It would have been obvious to one having ordinary skill in the art to have determined the optimum values of the relevant process parameters through routine experimentation in the absence of a showing of criticality. In re Aller, USPQ 233 (CCPA 1955)

It would have been obvious to one of ordinary skill in the art that by having more of the film dried during the stretching step of the drying step of Nishida, when the film is conveyed by rollers under a condition of having a R/W ratio of 0.2 to 0.6, the less time amount of time would be needed during the subsequent heat treating step conducted after stretching to fully dry the film.

As for claim 4, Nishida teaches that the film is conveyed along the rollers by applying tension in a longitudinal uniaxial direction to cause stretching (Page 2 Paragraph 0022), thus the method of Nishida uses tensile force to convey the film along the rollers.

Conclusion

Claims 1 through 4 have been rejected. Claims 5 through 8 have been withdrawn from consideration as being non-elected inventions. No claims have been allowed.

Art Unit: 1792

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Wieczorek whose telephone number is (571)270-5341. The examiner can normally be reached on Monday through Friday; 7:30 AM to 5:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on (571)272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Wieczorek/
Examiner, Art Unit 1792

/Michael Cleveland/

Supervisory Patent Examiner, Art Unit 1792